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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,745	08/31/2001	Christian Weber	10191/1908	1989

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EXAMINER

LIU, JOSHUA C

ART UNIT	PAPER NUMBER
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2121

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

14

Office Action Summary

Application No.

09/944,745

Applicant(s)

WEBER, CHRISTIAN

Examiner

Joshua C Liu

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001 (priority date 9/2/2000).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/31/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10 have been examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on September 2, 2000. It is noted, however, that applicant has not filed a certified copy of the 100 43 254.9 application as required by 35 U.S.C. 119(b).

Drawings

3. The drawings are objected to because
 - Elements 10-34 in Fig. 1 do not have explanatory labels.
 - Fig. 2-3 contain explanatory labels in German, which should be translated into English.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities:
 - On Pg. 3 L. 4, "8" should be "18."
 - On Pg. 4 L. 15, "input" should be "inputted."
 - On Pg. 4 L. 14, Pg. 6 L. 18, and Pg. 7 L. 8, translate "OFFVORL" into English.

Claim Objections

5. Claims 5 and 10 are objected to because of the following informalities:

- In claim 5, "futher" should be "further."
 - Claim 10 recites "a storage medium" on L. 1. The Examiner advises that the Applicant substitute "a storage medium" with "a computer-readable storage medium" to avoid a bar for non-statutory invention.
- Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kadlec et al (US Patent Number 5,914,830; Issued 6/22/1999).

Claim 1

Claim 1 recites

A method for driving a hysteresis-exhibiting final controlling element, comprising the steps of:

- (a) driving the final controlling element by a drive signal having a variable drive quantity;
- and
- (b) correcting the variable drive quantity as a function of a change thereof over time.

Claim 1 is anticipated by Kadlec, wherein Kadlec teaches:

- A method for position control, comprising the steps of:
 - (a) See (Kadlec Fig 1A; Col 10 L. 24-42, "Referring again... preventing instability.");
 - and
 - (b) See (Kadlec Col 10 L. 43-Col 11 L. 6, "In those implementation... a given track.").

Claim 2

Claim 2 recites "The method according to claim 1, further comprising the step of: forming an offset value signal on the basis of the change over time of the variable drive quantity, wherein: the step of correcting is performed in accordance with the offset value signal," which is anticipated by Kadlec:

- See §102 rejection of claim 1, *supra*, and (Kadlec Col 11 L. 1-6, "The error signal... a given track."; Col 20 L. 30-53, "D.C. Input... the sensor offsets."; Col 28 L. 7-16, "Referring to FIG. 23A... function of time."; Fig. 5B and 10A-C; Col 29 L. 61-Col 30 L. 29, "Referring now... compensation block."; Col 33 L. 32-37, "Broadly,... converge to zero."; Col 34 L. 6-14, "Assuming the servo... on a path.").

Claim 3

Claim 3 recites "The method according to claim 2, further comprising the step of: limiting the offset value signal to a maximum offset value," which is anticipated by Kadlec:

- See §102 rejection of claim 2, *supra*, and (Kadlec Col 19 L. 48-59, "Had Load Algorithm... the master controller."; Col 22 L. 32-35, "Reference Velocity Deceleration... end of seeks."; Fig. 10A-C).

Claim 4

Claim 4 recites "The method according to claim 3, wherein: the maximum offset value is variable and is changed as a function of zero crossings of the offset value signal," which is anticipated by Kadlec:

- See §102 rejection of claim 3, *supra*, and (Kadlec Col 18 L. 40-49, "The gain path... zero crossing detection."; Fig. 10A-C; Col 29 L. 55-60, "The zero crossing... signal $u(k)$ ").

Claim 5

Claim 5 recites "The method according to claim 4, further comprising the step of: reducing the maximum offset value when a counter reading exceeds a predetermined threshold value within a predefined time between two of the zero crossings," which is anticipated by Kadlec:

- See §102 rejection of claim 4, *supra*, and (Kadlec Col 28 L. 30-37, "At time T_2 ,... remains inactive."; Fig. 23A).

Claim 6

Claim 6 recites "The method according to claim 5, wherein: the counter reading is formed from the offset value signal," which is anticipated by Kadlec:

- See §102 rejection of claim 5, *supra*, and (Kadlec Col 28 L. 27-34, "Assuming the motion... remains inactive.").

Claim 7

Claim 7 recites "The method according to claim 6, wherein: the maximum offset value is reduced more quickly when a second, higher threshold value is exceeded," which is anticipated by Kadlec:

- See §102 rejection of claim 6, *supra*, and (Kadlec Col 28 L. 12-16, "FIG. 23A... function of time."; Fig. 19 and 23A; Col 70 L. 15-18, "1. If the positional... to measure."; Col 71 L. 35-47, "If, however,... the main loop.").

Claim 8

Claim 8 recites "The method according to claim 2, wherein: the offset value signal corresponds to a value of the change over time of the variable drive quantity," which is anticipated by Kadlec:

- See §102 rejection of claim 2, *supra*, and (Kadlec Fig. 10A-C; Col 11 L. 1-6, "The error signal... a given track.").

Claim 9

Claim 9 recites

A device for driving a final controlling element exhibiting hysteresis, comprising:

(a) a control device that includes at least one microcomputer and that forms a variable drive signal quantity for driving the final controlling element in accordance with at least one program executed by the at least one microcomputer, wherein:

(i) the at least one program corrects the variable drive signal quantity as a function of a change thereof over time.

Claim 9 is anticipated by Kadlec, wherein Kadlec teaches:

- A device for driving a final controlling element exhibiting hysteresis, comprising:

(a) See (Kadlec Fig 1A; Col 10 L. 24-42, "Referring again... preventing instability.");

and

(i) See (Kadlec Col 10 L. 43-Col 11 L. 6, "In those implementation... a given track."; Col 33 L. 32-37, "Broadly... converge to zero.").

Claim 10

Claim 10 recites

A storage medium in which a computer program is stored, the computer program causing a processing device to perform the steps of:

- (a) driving a final controlling element by a drive signal having a variable drive quantity;
- and
- (b) correcting the variable drive quantity as a function of a change thereof over time.

Claim 10 is anticipated by Kadlec, wherein Kadlec teaches:

- A computer-readable storage medium in which a computer program is stored
(Kadlec Fig. 1A; Col 33 L. 32-37, "Broadly,... converge to zero."), the computer
program causing a processing device to perform the steps of:
 - (a) See (Kadlec Fig 1A; Col 10 L. 24-42, "Referring again... preventing instability.");
and
 - (b) See (Kadlec Col 10 L. 43-Col 11 L. 6, "In those implementation... a given track.").

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua C Liu whose telephone number is (703) 305-6435. The examiner can normally be reached on Monday-Friday, 8:30am-5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anil Khatri can be reached on (703) 305-0282. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



jl



ANIL KHATRI
SUPERVISORY PATENT EXAMINER